STN

(FILE 'HOME' ENTERED AT 13:14:59 ON 06 JUN 1998)

FILE 'REGISTRY' ENTERED AT 13:15:57 ON 06 JUN 1998

L1	0	S	MTDPRQLHLAGFFC/SQSP
L2	0	S	ATISTTYY/SQSP
L3	0	S	LAQRNVPT/SQSP
L4	78	S	SPHINGOMONAS
L5	0	S	L4 AND DSZ
L6	7	S	DSZA OR DSZB OR DSZC OR DSZ A OR DSZ B OR DSZ C
L7	0	S	L6 AND L4

APS

(FILE 'USPAT' ENTERED AT 09:12:24 ON 06 JUN 1998)

L1	0	S	(DSZA OR DSZB OR DSZC) AND SPHINGOMONAS
L2	1	S	(DSZA OR DSZB OR DSZC)
L3	0	S	SPHINGOMONAS AND BIODESULFURIZ?
L4	7365	S	DESULFUR?
L5	0	S	L4 AND SPHINGOMONAS
L6	351	S	RHODOCOC?
L7	0	S	L6 AND (DSZ(3W)A OR DSZ(3W)B OR DSZ(3W)C)
L8	41	S	DESULFUR? AND RHODOCOC?
L9	1003	S	(DIBENZOTHIOPHENE# OR DBT)
L10	23	S	L9 AND RHODOCOC?
L11	0	S	L9 AND SPHINGOMONAS

STN

(FILE 'HOME' ENTERED AT 09:31:11 ON 06 JUN 1998)

FILE 'CAPLUS, MEDLINE' ENTERED AT 09:32:22 ON 06 JUN 1998

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L1        34878 S DESULFUR?
L2          317 S SPHINGOMONAS
L3            2 S (DSZ(3W)A OR DSZ(3W)B OR DSZ(3W)C)
L4         2886 S DIBENZOTHIOPHENE OR DBT
L5            0 S L2 AND L3
L6            0 S L3 AND L4
L7            3 S L4 AND L2
L8            0 S L7 AND L1
L9            0 S L1 AND L2
L10           5 S L3 OR L7
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=> d 1-5 ibib ab

L10 ANSWER 1 OF 5 CAPLUS COPYRIGHT 1998 ACS

ACCESSION NUMBER: 1997:683021 CAPLUS
DOCUMENT NUMBER: 127:297978
TITLE: Constituents of an Organic Wood Preservative that Inhibit the Fluoranthene-Degrading Activity of **Sphingomonas** paucimobilis Strain EPA505
AUTHOR(S): Lantz, S. E.; Montgomery, M. T.; Schultz, W. W.; Pritchard, P. H.; Spargo, B. J.; Mueller, J. G.
CORPORATE SOURCE: SBP Technologies Inc., Gulf Breeze, FL, 32561, USA
SOURCE: Environ. Sci. Technol. (1997), 31(12), 3573-3580
CODEN: ESTHAG; ISSN: 0013-936X
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CJACS-IMAGE; CJACS

AB **Sphingomonas** paucimobilis strain EPA505 is capable of utilizing many components of coal tar creosote as sole sources of C and energy for bacterial growth, including fluoranthene and other polycyclic arom. hydrocarbons (PAH). During several bioremediation studies, however, we obsd. that the fluoranthene degradative activity of strain EPA505 was inhibited by the presence of undefined creosote constituents. In practice, integration of a pretreatment step prior to inoculation with strain EPA505 was necessary to facilitate the biodegrdn. of high mol. wt. (HMW) PAHs. Expts. were thus initiated to det. which compd. classes in creosote inhibited fluoranthene metab. by strain EPA505. Creosote was fractionated by solvent extn. at various pH, and 3 chem. classes were examd.: acid (phenolics), base (N-heterocyclics), and neutral (PAH). The mineralization rate of 14C-labeled fluoranthene and cell viability were examd. in the presence of these creosote fractions at a range of concns. These studies confirm that strain EPA505 has differing susceptibility to the effects of the 3 classes of creosote constituents. The obsd. order of toxicity/inhibition was basic fraction > acidic fraction > neutral fraction. These studies provide engineering guidelines and define contamination ranges under which strain EPA505 can be used most effectively as a catalyst in bioremediation.

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 1998 ACS
ACCESSION NUMBER: 1997:268196 CAPLUS
DOCUMENT NUMBER: 126:340861
TITLE: Comparative study of five polycyclic aromatic hydrocarbon-degrading bacterial strains isolated from contaminated soils
AUTHOR(S): Dagher, Fadi; Deziel, Eric; Lirette, Patricia; Paquette, Gilles; Bisaillon, Jean-Guy; Villemur, Richard
CORPORATE SOURCE: Centre de Recherche en Microbiologie Appliquee, Institut Armand-Frappier, Laval, PQ, H7V 1B7, Can.
SOURCE: Can. J. Microbiol. (1997), 43(4), 368-377
CODEN: CJMIAZ; ISSN: 0008-4166
PUBLISHER: National Research Council of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Five polycyclic hydrocarbon (PAH) degrading bacterial strains, Pseudomonas putida 34, Pseudomonas fluorescens 62, Pseudomonas aeruginosa 57, **Sphingomonas** sp. strain 107, and the unidentified strain PL1, were isolated from two contaminated soils and characterized for specific features regarding PAH degrdn. Degrdn. efficiency was detd. by the rapidity to form clearing zones around colonies when sprayed with different PAH solns. and the growth in liq. medium with different PAHs as sole source of carbon and energy. The presence of plasmids, the prodn. of biosurfactants, the effect of salicylate on PAH degrdn., the transformation of indole to indigo indicating the presence of an arom. ring dioxygenase activity, and the hybridization with the SphAb probe representing a sequence highly homologous to the naphthalene dioxygenase ferredoxin gene nahAb were examd. The most efficient strain in terms of substrate specificity and rapidity to degrade different PAHs was **Sphingomonas** sp. strain 107, followed by strain PL1 and P. aeruginosa 57. The less efficient strains were P. putida 34 and P. fluorescens 62. Each strain transformed indole to indigo, except strain PL1. Biosurfactants were produced by P. aeruginosa 57 and P. putida 34, and a bioemulsifier was produced by **Sphingomonas** sp. strain 107. The presence of salicylate in solid medium has accelerated the formation of clearing zones and the transformation of indole by **Sphingomonas** sp. strain 107 and P. aeruginosa 57 colonies. Plasmids were found in **Sphingomonas** sp. strain 107 and strain PL1. The SphAb probe hybridized with DNA extd. from each strain. However, hybridization signals were detected only in the plasmidic fraction of **Sphingomonas** sp. strain 107 and strain PL1. Using a polymerase chain reaction (PCR) approach, we detd. that several genes encoding enzymes involved in the upper catabolic pathway of naphthalene were present in each strain. Sequencing of PCR DNA fragments revealed that, for all the five strains, these genes are highly homologous with resp. genes found in the pah, dox, and nah operons, and are arranged in a polycistronic operon. Results suggest that these genes are ordered in the five selected strains like the pah, nah, and dox operons.

L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 1998 ACS
ACCESSION NUMBER: 1994:235372 CAPLUS
DOCUMENT NUMBER: 120:235372
TITLE: Absorption and disposition of SDZ IMM 125, a new cyclosporine derivative, in rats after single and repeated administration
AUTHOR(S): Bruelisauer, A.; Kawai, R.; Misslin, P.; Lemaire M.
CORPORATE SOURCE: Sandoz Pharma Ltd., Basel, Switz.
SOURCE: Drug Metab. Dispos. (1994), 22(2), 194-9
CODEN: DMDSAI; ISSN: 0090-9556

DOCUMENT TYPE: Journal
LANGUAGE: English

AB The absorption and disposition of **DSZ** 1MM 125, a new derivs. of the cyclosporine family, were studied in rats after oral, s.c., or i.v. dosing. The abs. bioavailability of 53% obsd. after a single oral dose of 10 mg/kg was variable and similar to that obsd. with cyclosporin A. The bioavailability was not modified during 21 days of daily treatment. The fraction of SDZ IMM 125 bound to plasma proteins was moderate (70% vs. 95% for cyclosporin A), whereas the uptake by blood cells was considerably higher than that of cyclosporin A varying from 80% at 50 ng/mL to 30% at 10,000 ng/mL. SDZ IMM 125 distributes extensively in most tissues except in brain; multiple oral administration does not modify the tissue distribution and indicates that there is no drug accumulation. The tissue distribution of SDZ IMM 125 is lower than that of cyclosporin A; the vol. of distribution of this drug (2.6 L/kg) is roughly half that of cyclosporin A, which is consistent with the lower lipophilicity of this compd. The systemic clearance of SDZ IMM 125 is relatively low (1.3 mL/min) and comparable to that of cyclosporin A. The excretion of SDZ IMM 125 occurs essentially through the liver via the bile; biliary and urinary excretion of unchanged drug represents 18% and 7% of the dose, resp. The significant excretion of unchanged drug in both bile and urine represents a major difference compared with cyclosporin A, which is not excreted as unchanged drug to any extent.

L10 ANSWER 4 OF 5 CAPLUS COPYRIGHT 1998 ACS
ACCESSION NUMBER: 1992:190794 CAPLUS
DOCUMENT NUMBER: 116:190794
TITLE: Metabolism of dibenzo-p-dioxin by **Sphingomonas** sp. strain RW1
AUTHOR(S): Wittich, Rolf Michael; Wilkes, Heinz; Sinnwell, Volker; Francke, Wittko; Fortnagel, Peter
CORPORATE SOURCE: Inst. Allg. Bot., Univ. Hamburg, Hamburg, D-2000, Germany
SOURCE: Appl. Environ. Microbiol. (1992), 58(3), 1005-10
CODEN: AEMIDF; ISSN: 0099-2240
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In the course of screening for dibenzo-p-dioxin (I)-utilizing bacteria, a **Sphingomonas** strain was isolated from the river Elbe. The isolate grew with both the biaryl ethers I and dibenzofuran as sole sources of C and energy, showing doubling times of about 8 and 5 h, resp. Biodegrdn. of the 2 arom. compds. initially proceeded after an oxygenolytic attack at the angular position adjacent to the ether bridge, producing 2,2',3-trihydroxydiphenyl ether (II) or 2,2',3-trihydroxybiphenyl from the initially formed dihydrodiols, which represent extremely unstable hemiacetals. Results obtained from detns. of enzyme activities and O2 consumption suggest meta cleavage of the trihydroxy compds. During dibenzofuran degrdn., hydrolysis of 2-hydroxy-6-oxo-6-(2-hydroxyphenyl)-hexa-2,4-dienoate yielded salicylate, which was branched into the catechol meta-cleavage pathway and the gentisate pathway. Catechol obtained from the product of meta ring fission of II was both ortho and meta cleaved by **Sphingomonas** RW1 when this organism was grown with I.

L10 ANSWER 5 OF 5 CAPLUS COPYRIGHT 1998 ACS
ACCESSION NUMBER: 1991:670514 CAPLUS
DOCUMENT NUMBER: 115:270514
TITLE: Effects of the partial dopamine receptor agonists SDZ 208-911, SDZ 208-912 and terguride on central monoamine receptors. A behavioral, biochemical and electrophysiological study
AUTHOR(S): Svensson, Kjell; Ekman, Agneta; Piercey,

Montford F.; Hoffmann, William E.; Lum, Janet
[redacted] Carlsson, Arvid
CORPORATE SOURCE: [redacted]ep. Pharmacol., Univ. Goeteborg, [redacted]oeteborg, S-400 33, Swed.
SOURCE: Naunyn-Schmiedeberg's Arch. Pharmacol. (1991), 344(3), 263-74
CODEN: NSAPCC; ISSN: 0028-1298
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The partial dopamine receptor agonists SDZ 208-911 {N-[(8-alpha)-2,6-dimethylergoline-8-yl]-2,2-dimethylpropanamide}, SDZ 208-912 {N-[(8-alpha-2-chloro-6-methylergoline-8-yl]-2,2-dimethylpropanamide} and terguride (transdihydrolisuride; TDHL) were tested in biochem., behavioral (locomotor activity) and electrophysiol. assays in male rats. In reserpine-pretreated rats, SDZ 208-911 and terguride dose-dependently reduced striatal DOPA formation (NSD 1015 treatment) with similar efficacy (-80%) and potency as the selective D2 receptor agonist quinpirole (LY 171555). SDZ 208-912 only produced a partial redn. (-32%) at the highest dose tested. SDZ 208-911 and terguride partially reversed (by approx. 50%) the gamma-butyrolactone (GBL)-induced increase in striatal DOPA accumulation. Quinpirole produced a 100% reversal while SDZ 208-912, per se, was inactive. While quinpirole decreased DOPA accumulation, all three partial agonists elevated striatal DOPA accumulation in non-pretreated rats with SDZ 208-912 being as potent and efficacious as haloperidol. The three partial agonists displayed comparatively high affinities in vitro from the dopamine D2 (3H-spiperone) receptor site and somewhat lower affinity for the 5-HT1A (3H-8-OH-DPAT) receptor site. SDZ 208-911 and SDZ 208-912 also showed high affinities for central alpha2 (3H-idazoxane) receptors. In line with these findings, the partial ergoline agonists dose-dependently elevated the DOPA accumulation in the noradrenaline-rich cortical brain region and decreased the 5-HT synthesis rate (5-HTP accumulation) in the limbic brain region. Furthermore, high doses of SDZ 208-911 and terguride produced weak signs of the 5-HT behavioral syndrome (flat body posture) in reserpinized rats. In the locomotor activity studies in non-pretreated rats, SDZ 208-911, SDZ 208-912 and terguride reduced the activity to 10-20% of controls with SDZ 208-912 being approx. ten times less potent than the other two compds. Weak postsynaptic dopamine receptor agonist effects of the partial agonists were demonstrated only in reserpine-pretreated rats; all three partial agonists tested produced occasional forward locomotion and the so-called "jerking" behavior. Extracellular single unit recordings were carried out in chloral hydrate-anesthesized rats to investigate the effects on firing rates of dopamine neurons located in the substantia nigra pars compacta. I.v. administration of SDZ 208-911 and terguride depressed the firing rate by 42 and 53%, resp., while apomorphine completely inhibited the cells. SDZ 208-912 only reduced the firing by 16% and some cells displayed a biphasic response with a weak depression at low doses that disappeared at high doses. SDZ 208-912 and SDZ 208-911 completely reversed the inhibition of firing rate produced by d-amphetamine, while SDZ 208-912 partially (81%) reversed the inhibitory effects of apomorphine. It is concluded that all three amino-ergolines possess partial dopamine receptor agonistic effects with SDZ 208-911 and terguride displaying a similar intrinsic efficacy (in certain models approx. 50% that of quinpirole or apomorphine). On the other hand, **DSZ** 208-912 displays **a** very low intrinsic efficacy, detectable only in the electrophysiol. model and in reserpinized rats. The results are discussed in relation to the